



Contribution ID: 45

Type: **Parallel Talk**

Unveiling Generalized Parton Distributions through the Pseudo-Distribution Approach

Thursday, 3 August 2023 14:50 (20 minutes)

Understanding the intricate three-dimensional internal structure of the nucleon has been a long-standing challenge. The main quantitative tool to map this structure are the generalized parton distributions (GPDs). In this talk, we present the first extraction of unpolarized GPDs using the pseudo-distribution approach on the lattice. We use one ensemble of $N_f = 2 + 1 + 1$ twisted mass fermions at a non-physical pion mass of 260 MeV and a lattice spacing of 0.093 fm.

Topical area

Structure of Hadrons and Nuclei

Primary authors: NURMINEN, Niilo (Adam Mickiewicz University); BHATTACHARYA, Shohini (BNL); CHOMICKI, Wojciech (Adam Mickiewicz University); CICHY, Krzysztof (Adam Mickiewicz University); CONSTANTINOU, Martha (Temple University); METZ, Andreas (Temple University); STEFFENS, Fernanda (Bonn)

Presenter: NURMINEN, Niilo (Adam Mickiewicz University)

Session Classification: Structure of Hadrons and Nuclei